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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,922

09/22/2003

Robert Edward Gott

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EXAMINER

HUGHES, ALICIA R

ART UNIT

PAPER NUMBER

1614

MAIL DATE

DELIVERY MODE

09/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,922	<b>Applicant(s)</b> GOTT ET AL.	
	<b>Examiner</b> ALICIA R. HUGHES	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 1-6 and 8-17 are currently pending and are the subject of this Office Action.

Applicant's arguments and amendments filed on 04 February 2008 and 04 April 2008 have been fully considered and are not deemed to be persuasive regarding the previous rejections made of record. Therefore, the finality of the Office Action issued on 04 January 2008 is hereby VACATED.

Rejections and objections not reiterated from previous office actions are hereby withdrawn. The following rejections are reiterated and expounded upon, and they constitute the complete set presently being applied to the instant application.

### ***Claim Rejections – 35 U.S.C. §103(a)***

The following is a quotation of 35 U.S.C. §103(a), which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 8-17 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,925,380 [hereinafter referred to as “Roulier et al”] in view of Müller et al as evidenced by U.S. Patent No. 5,382,611 [hereinafter referred to as “Steptoe, et al I”] and EPO 282451 A2 [hereinafter referred to as “Steptoe et al II”].

Roulier et al. teach a new dosage form for cosmetic or dermatological use “in the form of an expanded solid composition whose matrix comprises a cellular network formed from a starch-rich product and contains expanded thermoplastic hollow particles of homopolymer or copolymer of an ethylenically unsaturated monomer or mixture of such monomers” (Col. 1, lines 17-23). Importantly, the compositions “have the appearance of expanded cylinders, pellets, leaves or flakes, and can contain a sufficient amount of fillers to obtain good disintegration” (Col. 1, lines 34-37). The compositions can be “stored in the dry state, and be very readily amenable to rehydration after immersion in an aqueous medium to reconstitute formulations for make-up such as make-up foundations or formulations for care or hygiene such as creams, milks, foam baths, gels and shampoos” (Col. 2, lines 25-31). Roulier et al also disclose that the composition most preferably has starches modified in respect of the amylase/amylopectin ratio, such as the product HYLON VII sold by Amylum; and starches modified by crosslinking or modified with a functional group, such as the crosslinked maize starch sold under the name

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RESISTAMYL E2 by Amylum, the weakly quaternized maize starch sold under the name MYPLUS W7 by Amylum (Col. 3, lines 40-50).

Roulier et al also disclose that the composition can also contain cosmetic active agents, such as humectants, that may be present in the final composition in an amount ranging between 0% to 20% (Col. 5, lines 8-14). By way of example, the invention discloses a formulation for dry shampoo wherein maize starch the common name for zea mays starch, according to the USDA Natural Resources Conservation Service Plants Database), is present as 35% by weight of the total composition (Col. 6, lines 15-28), and the “matrix comprising a cellular network formed from a starch-rich product represents from 70% to 98% by weight of the weight of the total composition” (Col. 8, lines 1-4, claim 9).

One of ordinary skill in the art would be motivated to combine the teachings of Roulier et al with the teachings of Müller et al, because they teach overlapping subject matter, most notably compositions that include shampoos that are comprised mainly of destructurized starch carriers that are water-dissolvable.

Müller et al teach a composition, which has an aqueous phase, for caring for the hair, skin or teeth in which a cleaning action is essential, including for example, “shampoo, shower gel, foam bath, liquid soap, manual dishwashing composition or hair conditioning composition” (Abstract; see also Col. 6, lines 8-13). “The composition according to the invention can be provided in any form, for example, as solution, emulsion, suspension, gel or foam. It can also be provided as a dry powdery composition which is reconstituted in an aqueous medium upon use” (Col. 5, lines 11-15). Müller et al teach that for all embodiments of their invention, can contain

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“additives selected from preservatives, perfumes, ... sun protection agents ...,” etc. (Col. 8, lines 38-44).

Applicants also argue that the references in total fail to teach a fragrance being deposited onto the starch. Müller et al also teach that the starch is a spray-dried starch that comprises largely intact starch granules agglomerated to loose aggregates taking on the form of indented spheres where the majority of the granules are whole and unbroken (Col. 24, lines 58-67 through Col. 25, lines 1-4). In assigning the references their broadest reasonable interpretation and in addition considering the make-up of the invention, that there are perfumed additives as part of the disclosed invention and the particles are dried as claimed, it would logically follow that fragrance would be interspersed with the starch and therefore, found on the starch.

Applicant argues that the large distinction that impedes the present analysis from establishing a *prima facie* case of obviousness is that the reference notes pre-gelatinized starches rather than destructure starches. Applicant also traverses this rejection on the basis that chemically modified starches, which may be either non-gelatinized or pre-gelatinized are quite different from destructure starch and also, that the present set of claims is focused on a solid rather than an emulsion base. These traversals are not persuasive, however, because it is well-understood in the chemical art that destructure starch is produced by heating a chemically non-modified starch material, and it is well-known in the art that cosmetic compositions may generally have a solid, emulsion, or liquid base. See Abstract of Steptoe et al I. More specifically, starches are destructure by the heating of starched material to an elevated temperature sufficient to form a thermoplastic melt, and these temperatures are within the range

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of 100 to 200 degrees, preferably falling within the range of 140 to 190 degrees and most preferably falling within the range of 160 to 185 degrees. See Steptoe et al II.

Furthermore, at the time the instant invention was contemplated, it was well-known in the art that one of the problems with starch binders is that they are generally very sticky once dissolved or gelatinized in water. While this makes them generally good binding agents, it complicates the manufacturing process since sheets or articles made using large amounts of dissolved or gelated starch binders have a tendency to stick to the mold or sheet-forming apparatus. On the other hand, unmodified starch granules are generally insoluble in water and merely act as passive particulate fillers in wet systems unless the compositions containing starch granules are heated to above the gelation temperature of the starch, providing the requisite motivation to combine references in this case. See. U.S. Patent Application No. 5,736,209 [hereinafter referred to as "Andersen, et al"] (Col. 4, lines 44-60).

Finally, while the Applicant argues unexpected results rendered by the utilization of a destructure starch rather than a non-destructured type, such argument is but an allegation lacking factual support.

In view of the foregoing, it would have been *prima facie* obvious to one of ordinary skill in the art to make a solid cosmetic composition and/or foamed solid cosmetic composition with a zeamays starch base with a deposited fragrance and cosmetic agent.

### ***Conclusion***

No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Hughes whose telephone number is 571-272-6026. The examiner can normally be reached from 9:00 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at 571-272-0718. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Public PAIR only. For information about the PAIR system, see <http://pair-direct-uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia R. Hughes/

Examiner, Art Unit 1614

/Raymond J Henley III/  
Primary Examiner, Art Unit 1614